

10/529319

## SEQUENCE LISTING

JC17 Rec'd PCT/PTO 25 MAR 2005

<110> DRANCOURT, Michel  
RAOULT, Didier

<120> Molecular identification of bacteria of genus Streptococcus

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<140> PCT/FR 03/03293  
<141> 2004-11-04

<150> FR 02/13792  
<151> 2002-11-05

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<170> PatentIn version 3.1

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<211> 3096

<212> DNA

<213> Enterococcus faecalis

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<220>  
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 <223> n represents a, t, c or g or i

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20

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 <223> n represents a, t, c or g or i

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23

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<210> 9  
<211> 725  
<212> DNA  
<213> Streptococcus sanguinis

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ggtca

725

<210> 10  
<211> 728  
<212> DNA  
<213> Streptococcus salivarius

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caggtcca 728

<210> 11  
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<212> DNA  
<213> Streptococcus pyogenes

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725

<210> 12  
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 <212> DNA  
 <213> Streptococcus pneumoniae

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<210> 13  
 <211> 694  
 <212> DNA  
 <213> Streptococcus oralis

<400> 13  
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<210> 14  
 <211> 728  
 <212> DNA  
 <213> Streptococcus mutans

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<210> 15  
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 <212> DNA  
 <213> Streptococcus mitis

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 catggtgaca cctgattgca attcatctcc atttgacgt gtaaagatct taacatcacg 480  
 aaccacacca tcagctccgt gtggtacacg aagagaagtg tcacgtactt cacgagattt 540  
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 catttcgtca agatctttaa gggcatcttc cccaacgttt gggatttcac gagtaatttc 720  
 ttcaggtcca 730

<210> 16  
 <211> 697  
 <212> DNA  
 <213> Streptococcus equinus

<400> 16  
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 tatccgtatc ggtgctgaag ttaaagaagg tgacatcctt gtaggtaaag taacacctaa 120  
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 cgtaaaaatc ttacacgtg caaacggtga tgaattacaa tcaggtgtta acatgctcgt 300  
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 cggtaacaaa ggggttggtt ctggtgtgtt tccagttgaa gacatgcctt atcttccaga 420  
 cggaactcca gtcgatatca tggtgaaccc acttggggtg ccatctcgta tgaacatcgg 480  
 acaagttatg gagcttcacc ttggtatggc tgctcgtaac cttggtattc acattgcaac 540  
 accagtcttt gatggggcaa cttctgaaga ctttgggat acagttaacg aagctggtat 600  
 ggctagcgac gctaagacag ttctttacga tggacgtact ggtgaaccat ttgataaccg 660  
 tgtgtcagtt ggtgtcatgt acatgattaa acttcac 697

<210> 17  
 <211> 731  
 <212> DNA  
 <213> Streptococcus constellatus

<400> 17  
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 tgcttcacga acagtatccc aaaggtcatc tgagcttgct ccgtcaaata ctggcggtgc 180  
 tatgtggata ccaaggttgc gagcagccat accaaggtga agctccataa cctgtccgat 240  
 attcatacgt gatggcacc ccaagtgggt caacatgatg tctactggtg ttccgtctgg 300  
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 tccggccatc ttatcccca cgcggtatct tcgtttttga gcaatgtaaa cacgcaccaa 420  
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 gacaacccca gcaccaccat gtggtacacg aagagatgtg tcacgtactt cacgagattt 540  
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 cgttacttta ccgacaagaa tgtcgccctc tttcacctca gcaccaatgc ggataattcc 660  
 catttcgtca aggtctctta gcgcatcttc cccaacgttt ggaatttcgc gcgtaatttc 720  
 ttcaggtcca a 731



<210> 18  
 <211> 697  
 <212> DNA  
 <213> Streptococcus anginosus

<400> 18  
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 cggaacaaaa ggggttggtt cccgcattgt tccagttgag gatatgccgt atcttcaga 420  
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 accagtatth gacggggcta gctcagatga tctttggaa accgttcgtg aagctggcat 600  
 ggatagcgat gctaagacaa tcctttatga tggccgtact ggtgagccat ttgataatcg 660  
 tgtatccgtt ggtgtcatgt acatgatcaa actccac 697

<210> 19  
 <211> 728  
 <212> DNA  
 <213> Streptococcus dysgalactiae

<400> 19  
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 cttcacgaac agtgtcccaa aggtcttctg atgaagcccc gtcaaagaca ggtgttgcaa 180  
 tgtgaatacc aagattacga gcagccatac caagggtgaag ttccataacc tgaccaatgt 240  
 tcatccgtga tggcacccca agaggggttca acatgatgtc aactgggtgt ccatctggaa 300  
 ggtatggcat gtcttcaact ggtacaatac gtgaaacgac acccttggtt ccgtgacgac 360  
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 tattaacacc tgattgcaat tcatcgccgt tagcgcgtgt aaagattttc acatcacgaa 480  
 cgataccatc accaccgtga ggtacacgaa gggacgtatc acgaacttca cgtgatttat 540  
 ctccaaagat ggcatgcaag agacgtctt cagcagaaag gtctttttca ctttaggtg 600  
 tgactttacc tactaagatg tcgccttctt taacctcagc accgatacgg ataattccca 660  
 tttcgtcaag gtctttgagc gcttcttcac caacgtttgg aatttcgcgg gtgatttctt 720  
 caggtcaa 728

<210> 20  
 <211> 728

<212> DNA

<213> Streptococcus bovis

<400> 20

tgtcatcaac catgtggtga agtttgatca tgtacatgat accaacagag acacgattat	60
caaatgggtc acctgtacga ccgtcataaa gaactgtctt agcgtcgcta tccataccag	120
cttcacgaac agtatcccaa aggtcttctg aagttgcccc gtcaaagact ggagttgcaa	180
tgtgaatacc gaggttacga gctgccatac caaggtgaag ttccataact tgtccgatat	240
tcatacgaga tggcacccca agaggggttca acatgatatc aactggagtt ccgtctggaa	300
gatatggcat gtcttcaaca ggaacgatac gagaaacaac ccctttgttt ccgtgacgac	360
cggccatttt atctccgact ttgattttac gtttttggtc aatgtaaaca cgaacgagca	420
tgttgacacc tgattgcaat tcatcacctg tagcacgtgt gaagatttta acatcacgaa	480
caacacgctc tccaccgtgt ggcacacgaa gtgatgtatc acgtacttca cgagatttat	540
caccgaagat tgcgtgaaga aggcgttctt cagcagaaag gtctttttca cctttaggtg	600
ttactttacc tacaaggata tcaccttctt taacttcagc accgatacgg ataataccca	660
tttcgtcaag gtctttaaga gcttcttcac caacgttttg aatttcgcga gtgatttctt	720
caggtcaa	728

<210> 21

<211> 728

<212> DNA

<213> Streptococcus acidominimus

<400> 21

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gcctctttta cagttgacca gagatcctct gagctcgac catcgaaaac cgggtgttgcg	180
atatggatac ccaagttacg agcagccata cccaagtga gttccataac ctgaccaata	240
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agatatggca tgtcttcaac tggtaacaata cgagaaacga cacccttggt accgtgacga	360
ccggccatct tatctccgac cttaatcttg cgtttttgag cgatatacac acgtaccagc	420
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acaacaccat ctgcaccgtg tggcacacgt agagaggtat cacgtacttc acgtgatttg	540
tcaccgaaga tagcatgcaa gagacgctcc tcagcagaaa gatctttttc accttttggt	600
gtcaccttac caacaagaat atcgcttct ttaacttctg caccgatacg gataataccc	660
atttcgtcaa ggtctttgag ggcttcttca ccaacgtttg gaatttcacg agtaatttct	720
tcaggtca	728

<210> 22

<211> 733

<212> DNA

<213> Streptococcus agalactiae

<400> 22

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acctgcttct tgaacagttt cccaaaggtc ttctgaagaa gccccatcaa agactggcgt	180
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gatattcata cgtgatggca cccaagtgg gttcaacatg atatcaactg gcgttccatc	300
tggttaagtaa ggcatatctt caacaggaac aatacgtgag acgacacctt tgtttccgtg	360
acgaccggcc atcttatcac cgactttgat tttaagtttt tgagcgatat aaacgcggac	420
aagcatatta acacctgatt gcaattcatc accatttgca cgagtaaaga ttttaacgtc	480
acgaactact ccatcgccac cgtgaggtag acgtagtga gtatcacgaa cttcacgtga	540
tttatcacca aaaatggcat gcaagagacg ttcttcagca gataagtcct tttcacctt	600
aggtgttacc ttaccaacaa gaatgtcacc ttcttttacc tcagcaccaa tgcggataat	660
tcccatttca tcgagatcac gtagtgaatc ttcaccaaca ttttggattt cagagtaat	720
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<210> 23

<211> 714

<212> DNA

<213> Streptococcus difficilis

<400> 23

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tcgaatggtt caccagtatg accatcataa agaacagtct tagcatctga atccatacct	120
gcttcttgaa cagtttccca aaggtcttct gaagaagccc catcaaagac tggcgttgca	180
atatgaatac ctaaattacg agcagccata cctaaatgaa gctccataac ttgtccgata	240
ttcatacgtg atggcacccc aagtgggttc aacatgatat caactggcgt tccatctggt	300
aaataaggca tatcttcaac aggaacaata cgtgagacga cacctttggt tccgtgacga	360
ccggccatct tatcaccgac tttgatttta cgtttttgag cgatataaac gcggacaagc	420
atattaacac ctgattgcaa ttcataacca ttgacagag taaagatttt aacgtcacga	480
actactccat cgccaccgtg aggtacacgt agtgaagtat cacgaacttc acgtgattta	540
tcaccaaaaa tggcatgcaa gagacgttct tcagcagata agtccttttc acccttaggc	600
gttaccttac caacaagaat gtcaccttct tttacctcag caccaatgcg gataattccc	660
atttcacga gatcacgtag tgaatcttca ccaacatttg gaatttcacg agta	714

<210> 24

<211> 728

<212> DNA

<213> Streptococcus intermedius

<400> 24  
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 cttcacgaac ggtttcccaa agatcatctg agctagctcc gtcaaagact ggcgttgcaa 180  
 tgtggatacc aagggttgca gcagccatac cgaggtgcaa ttccataact tgtccgatat 240  
 tcatacgtga cggcaccoca agaggattca acatgatata aactgggtgtc ccgtctggaa 300  
 gatacggcat atcctcaact ggaacaatgc gggaaacaac ccctttgttt ccgtggcgctc 360  
 cggccatctt atctccaacg cggattttcc gtttttgagc gatataaaca cgtaccaaca 420  
 tgttgacacc ggattgcaat tcatcacctg tcgcacgagt aaagattttt acatcacgga 480  
 caacacctgc accaccgtgt ggtacacgaa gggaggtatc acgcaacttca cgagacttat 540  
 caccaaaaat tgcatagaac aggcgttctt cagcggataa atctttttca cctttcggcg 600  
 ttactttacc gacaagaatg tcgccttctt ttacctcagc accaatgcgg ataattccca 660  
 tctcgtcaag gtctctcaaa gcacttccc cgacgtttgg aatttcgcgc gtgatttctt 720  
 caggtcca 728

<210> 25  
 <211> 728  
 <212> DNA  
 <213> Streptotoccus equi

<400> 25  
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 cttcacgaac agtttcccaa aggtcctcag acgtagctcc gtcaaagacc ggtgttgca 180  
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 gatatggcat atcctcaacc ggtacaatac gtgagacgac acccttggtta ccatgacgcc 360  
 cggccatttt atctccgacc ttgattttac gcttttgagc aatgtaaaca cgcaccagca 420  
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 caatcccgtc accaccatga ggaacacgta acgaggtatc acgaacctca cgtgatttat 540  
 caccaaagat agcatgcagg agacgttctt cagcagaaag gtctttttca cccttaggag 600  
 ttaccttacc aacaagaata tcgccttctt tgacctctgc accgatacgg ataataccca 660  
 tttcatcaag gtccttgagg gcttcttcac caacgtttgg caattcacgt gtgatttctt 720  
 caggtcca 728

<210> 26  
 <211> 697  
 <212> DNA  
 <213> Enterococcus gallinarum

<400> 26  
cactcgtgaa atcccgaatg tcggggaaga cgcattgaaa gatctagacg aaatgggtat 60  
catccgcatt ggtgcggaag tcaaagatgg cgatctgttg gttggtaaag taacgcctaa 120  
aggggtaacg gaactatctg cagaagaacg cttgcttcat gcaatctttg gtgaaaaagc 180  
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tcgcgtgtat atcgttcaaa aacggaaaat ccatgaaggg gataaaatgg ccggccgtca 360  
cggaataaaa ggggtcgttt ctgcgattat gccagaagaa gacatgcctt tcttaccaga 420  
cggtaacacca gttgatataca tgttgaaccc attaggggtg ccttcacgga tgaacattgg 480  
acaagtattg gaattacact taggaatggc tgcccgcgaa ttaggaatcc acgtggctac 540  
accagtcttt gatgggtgcc gcgatgaaga tgtctgggca acagttgcag aagccggcat 600  
ggctagcgac gccaaaaccg ttttgtatga tggccgtact ggagaaccat ttgatggctg 660  
aatctccgta ggtgtcatgt atatgatcaa attggcc 697

<210> 27  
<211> 727  
<212> DNA  
<213> *Enterococcus casseliflavus*

<400> 27  
tgtcatcaac catgtgggcc aatttgatca tgtacatgac accaacggag atgcggccat 60  
caaatggttc gccggtacgt ccgtcgtaaa gcaactgtttt ggcatcgctg gccattcctg 120  
cttcagcaac cgttgcccga acatcttcat cgctggctcc atcaaagact ggtgttgcca 180  
cgtgaatgcc taattgacgc gcagccattc ctaagtgtaa ctctaatact tgtccaatgt 240  
tcatccgaga aggtaccctt aatgggttca gcatgatata gactgggtgtg ccatctggta 300  
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cggccatttt atccccttca tggattttcc gtttttgaac gatataaacg cgaaccagca 420  
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aggtcca 727

<210> 28  
<211> 721  
<212> DNA  
<213> *Enterococcus saccharolyticus*

<400> 28

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cttcgcgaac tgtttcccat acgtcatcat ctgatgcacc atcaaatact ggtgtagcta	180
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caccgaagat tgcgtgcaat agacgttctt ctgcagataa ttcggttacc cctttaggag	600
tgactttacc tactaataag tcgccatctt gtacttcggc accgatacgg ataataacca	660
tttcgtctaa gtcttttaat gcgtcttccc caacgttagg aatttcgcgt gtattcttca	720
g	721

<210> 29  
 <211> 727  
 <212> DNA  
 <213> Enterococcus faecium

<400> 29	
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cttcacgaac tgtttcccat acgtcttcat cacttgacacc atcaaatact ggcgttgcta	180
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cgccaaagat cgcacgcaat agacgttctt ctgcagataa ttctgttacc ccttttgccg	600
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aggtcca	727

<210> 30  
 <211> 725  
 <212> DNA  
 <213> Enterococcus faecalis

<400> 30

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agaatggcat atcttcttcc ggcataatac gggaaacaac ccctttatct ccgtagcgtc	360
ccgccatttt atctccttcg tgaattttac gtttttgaac gatatagaca cgaactaaca	420
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ccccgaagat tgcgtgtaat aaacgttctt ctgcagataa ttctgtgacc cctttagggtg	600
tgactttccc aactagtaag tcgccatctt gaacttcagc accaatgcgg ataatcccca	660
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ggtca	725

<210> 31  
 <211> 570  
 <212> DNA  
 <213> *Enterococcus avium*

<400> 31	
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gagccgccat tcccagtggt aattccaaca cttgtccgat gttcatccga gatggcacac	180
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gcggtacacg aagagatgta tcacgaactt cagcagcctt ttcaccaaag atcgcatgca	480
acaaacgttc ttcagctgat aattctgtta cccctttagg agtgacttta ccaactaata	540
aatcaccatc atgaacttca gcaccaatac	570

<210> 32  
 <211> 732  
 <212> DNA  
 <213> *Abiotrophia defectiva*

<400> 32	
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gccggcttcc ttaactgttt ccagacatc ttcttcacta gcaccgtcaa agacaggtgt	180

tgcaatcttg atgcccattt cgcgagcagc catcccacag tgtaactcta ggacttgccc	240
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tggtagaat ggcataatctt cttccggcat gataaggag acaaccctt tgttaccgtg	360
acgaccggcc atcttatccc cttcattgat ttacgtttt tgtacgatgt agacgcggac	420
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cttctcaccg aagatagcat ggagcaagcg ttcttcgcga gacaactcgg tcacaccttt	600
tggtgttacc ttaccaacta agatatcgcc gtcttttact tccgccccga tacagataat	660
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 <212> DNA  
 <213> *Gemella morbilorum*

<400> 33	
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gtggattcca agttgttttag cagccatacc taagtgtagc tctaatactt gtccaatgtt	240
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gtaaggcata tcttcttctg gtaagatatt tgagataacc cctttgttac cgtgacgacc	360
ggccatttta tctcctacac gaattttacg tttttggacg ataaatacac gaacaagttc	420
atttacaccg ttaggtaatt cagcaccatc ttcacgttta aagattttta catcagcaac	480
tactccatca gcaccgtgag gtacacgtaa tgaagtatca cgtacttctt tagatttagc	540
tccaaagata gcatataata atttttcttc tggagtttgt tcagttaatc ctttcgggtg	600
aactttacct actaaaatat ctccatcttt aacttcagcc ccaatacgaa tgattcctcg	660
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caggtca	727

<210> 34  
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 <212> DNA  
 <213> *Gemella haemolysans*

<400> 34	
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cttcgcgaac ttagaccaa acatcttcac cagtagcacc atcgaatact ggtgtagcta	180



cgtggattcc aagttgttta gcagccatac ctaagtgtag ctctaatact tgtccaatgt	240
tcatacgaga tggaacccca agtgggttta acattacgtc aactggtgta ccatctggta	300
ggtaaggcat atcttcttct ggtaagatat ttgagataac ccctttgtta ccgtgacgac	360
cggccatttt atctcctaca cgaattttac gtttttggac gataaatata cgaacaagtt	420
catttacacc gttaggtaat tcagcaccat cttcacgttt aaagatttta acatcagcaa	480
ctactccatc agcacccgtga ggtacacgta atgaagtatc acgtacttct ttagatttag	540
ctccaaagat agcatataat aatttttctt ctggagtttg ttcagttaat cctttcggtg	600
taactttacc tactaaaata tctccatctt taacttcagc cccaatacga atgattcctc	660
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ggtcca	726

<210> 35  
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 <212> DNA  
 <213> Granulicatella adjacens

<400> 35	
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ctttaccaac taagatgtca ccatctttaa cttcggcacc gatacgaata attccgtctg	660
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<400> 36	
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<210> 51  
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<400> 51  
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25